

FIG. 1a

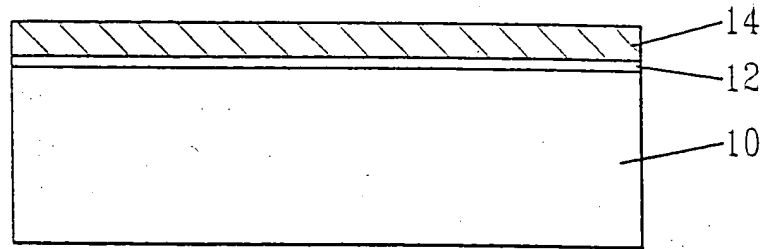


FIG. 1b

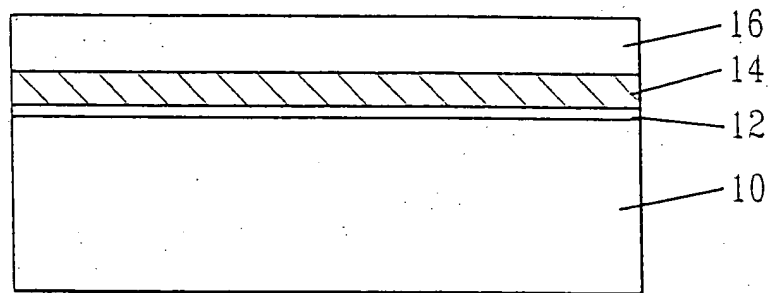


FIG. 1c

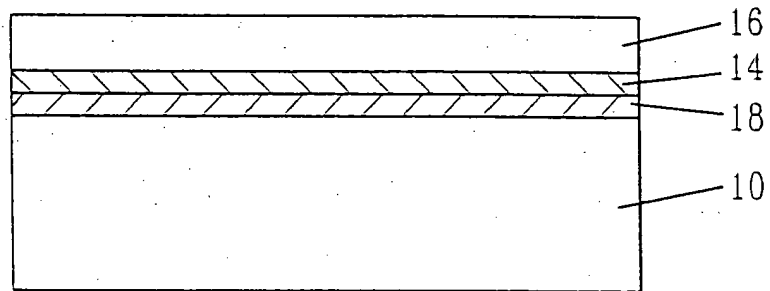


FIG. 1d

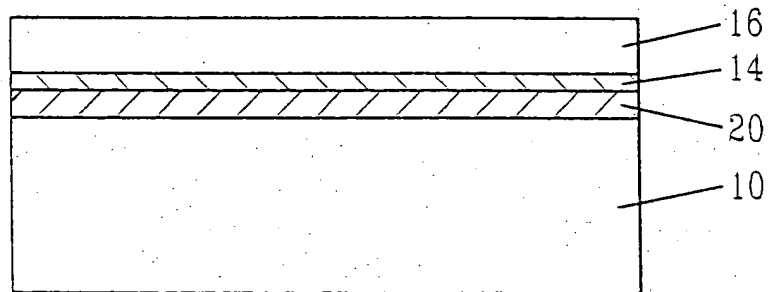


FIG. 1e

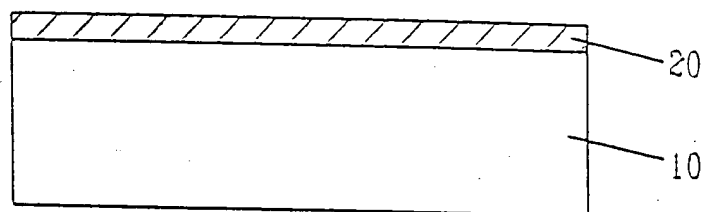


FIG. 1f

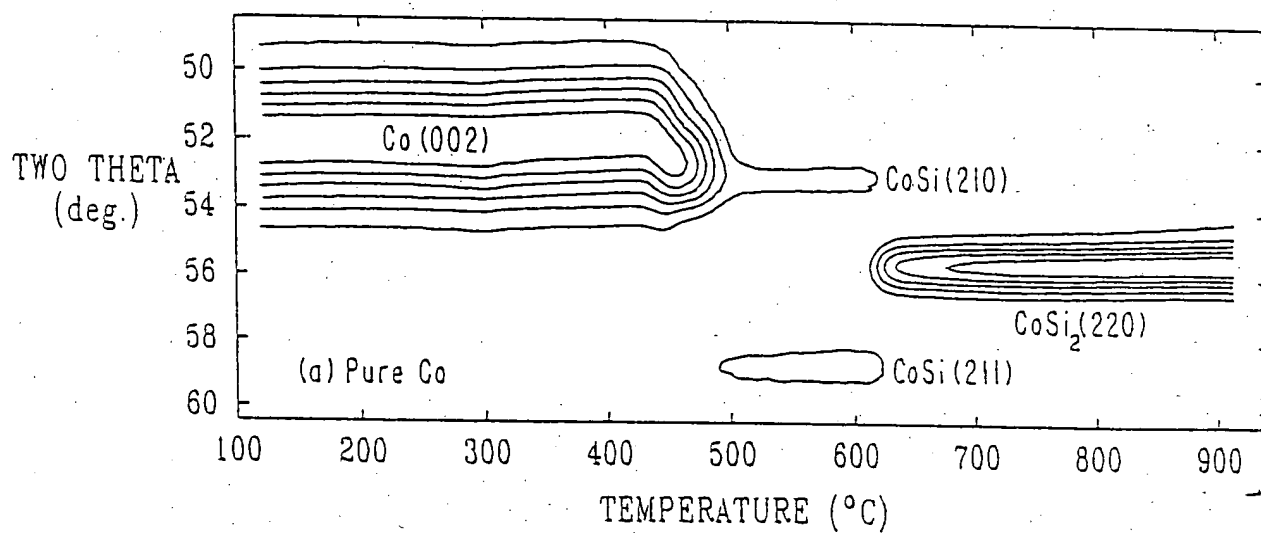
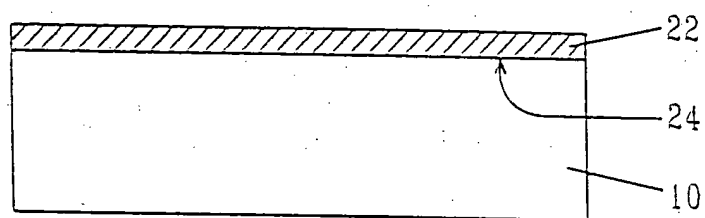


FIG. 2a (Prior Art)

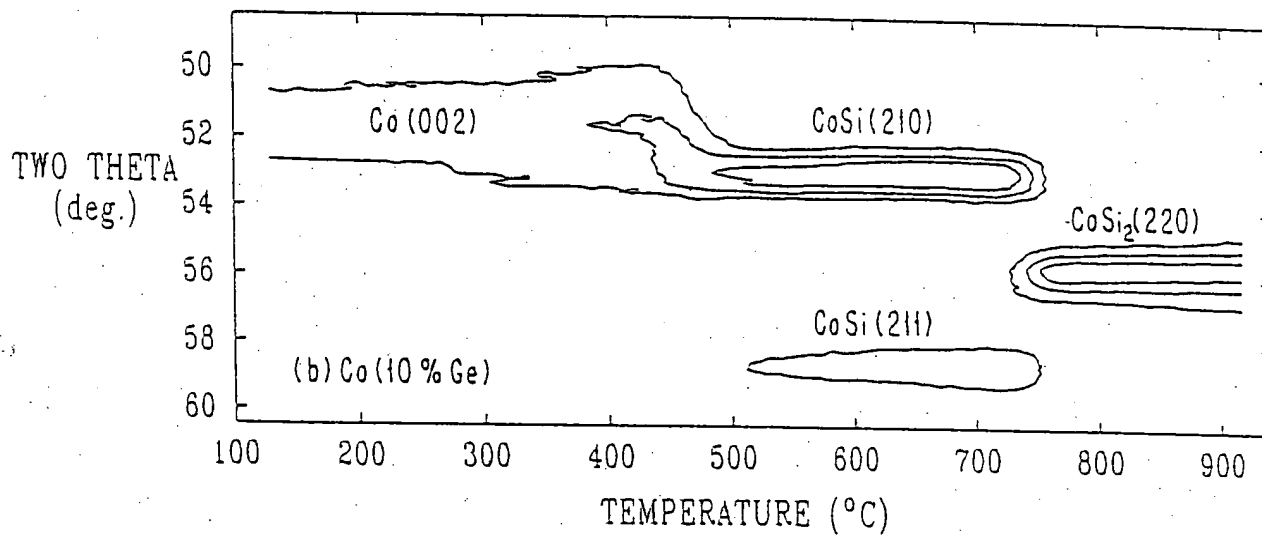


FIG. 2b

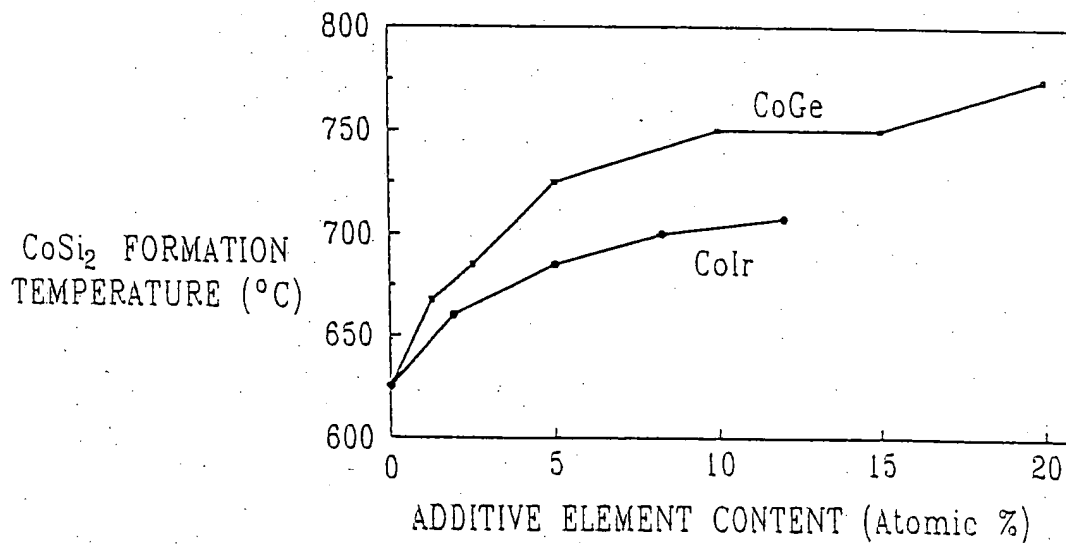


FIG. 3

FIG. 4a

20 nm TiN/7.4-10.5 nm Co (avg. 2.0/5.6 at. % alloy element) / Si (100)
Films annealed in He at 3°C/s from 100 to 950°C

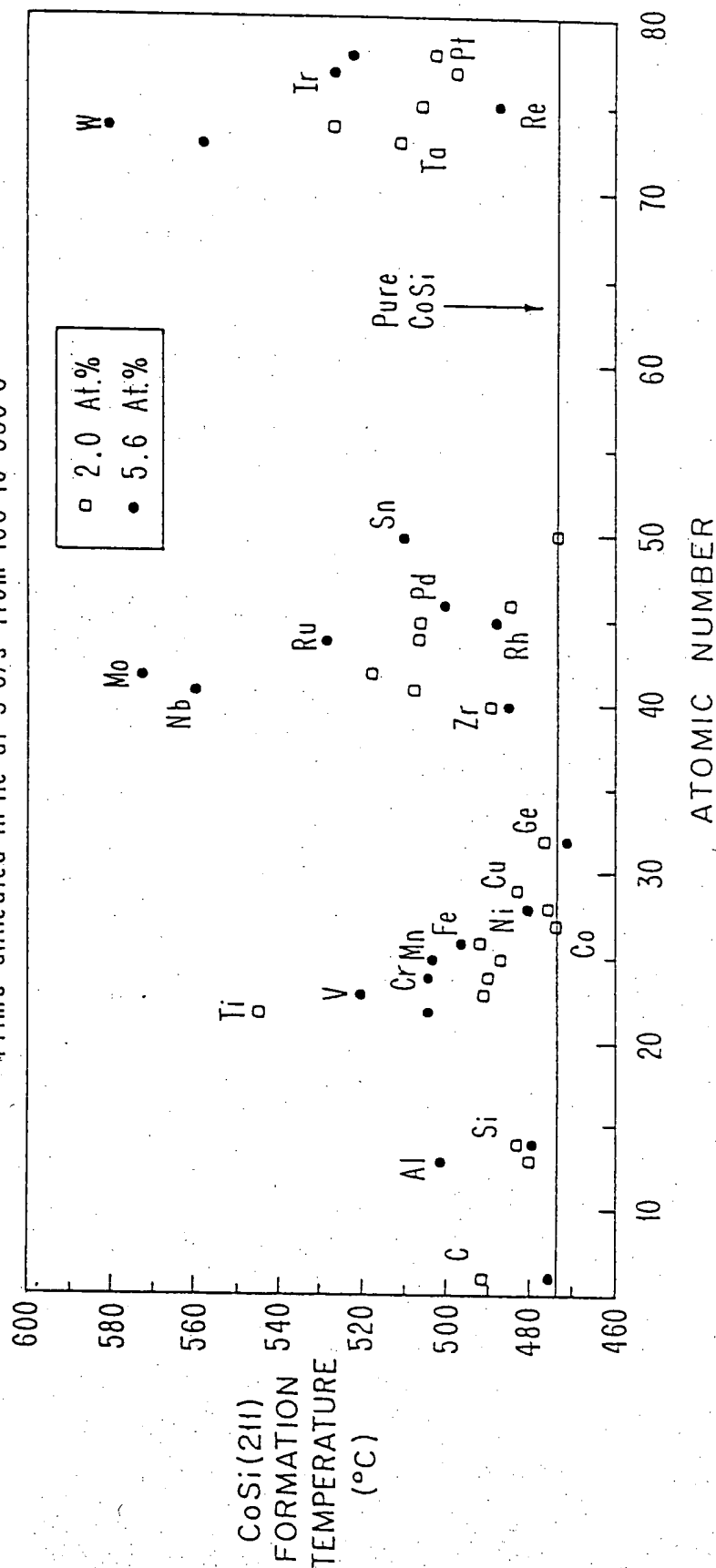


FIG. 4b

20 nm TiN/7.4-10.5 nm Co (avg. 2.0/5.6 at. % alloy element) / Si(100)

Films annealed in He at 3°C/s from 100 to 950°C

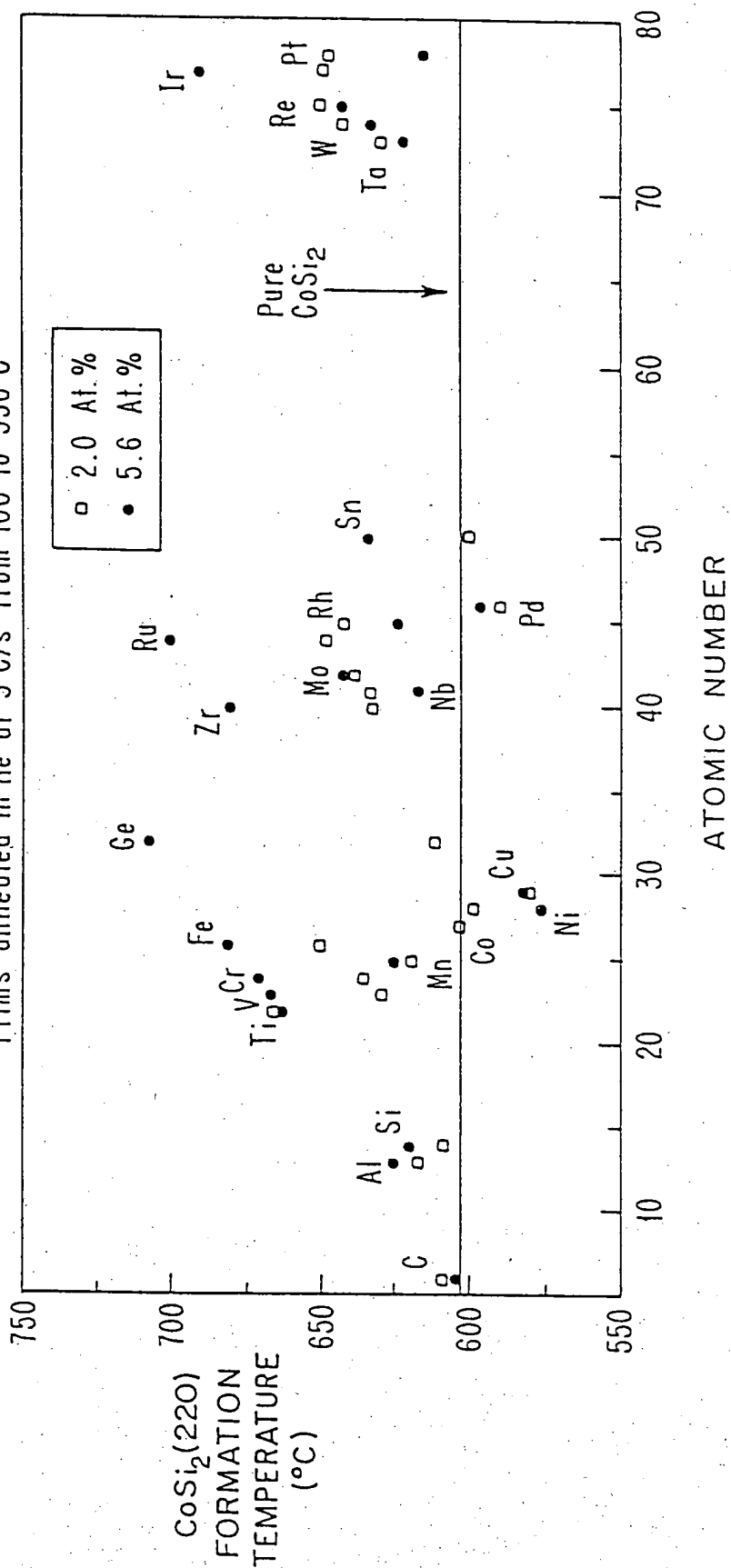


FIG. 5a

7.4-10.5 nm Co (avg. 2.0/5.6 at.% alloy element) / Si(100)
Films annealed in He at 3 °C/s from 100 to 535-620 °C

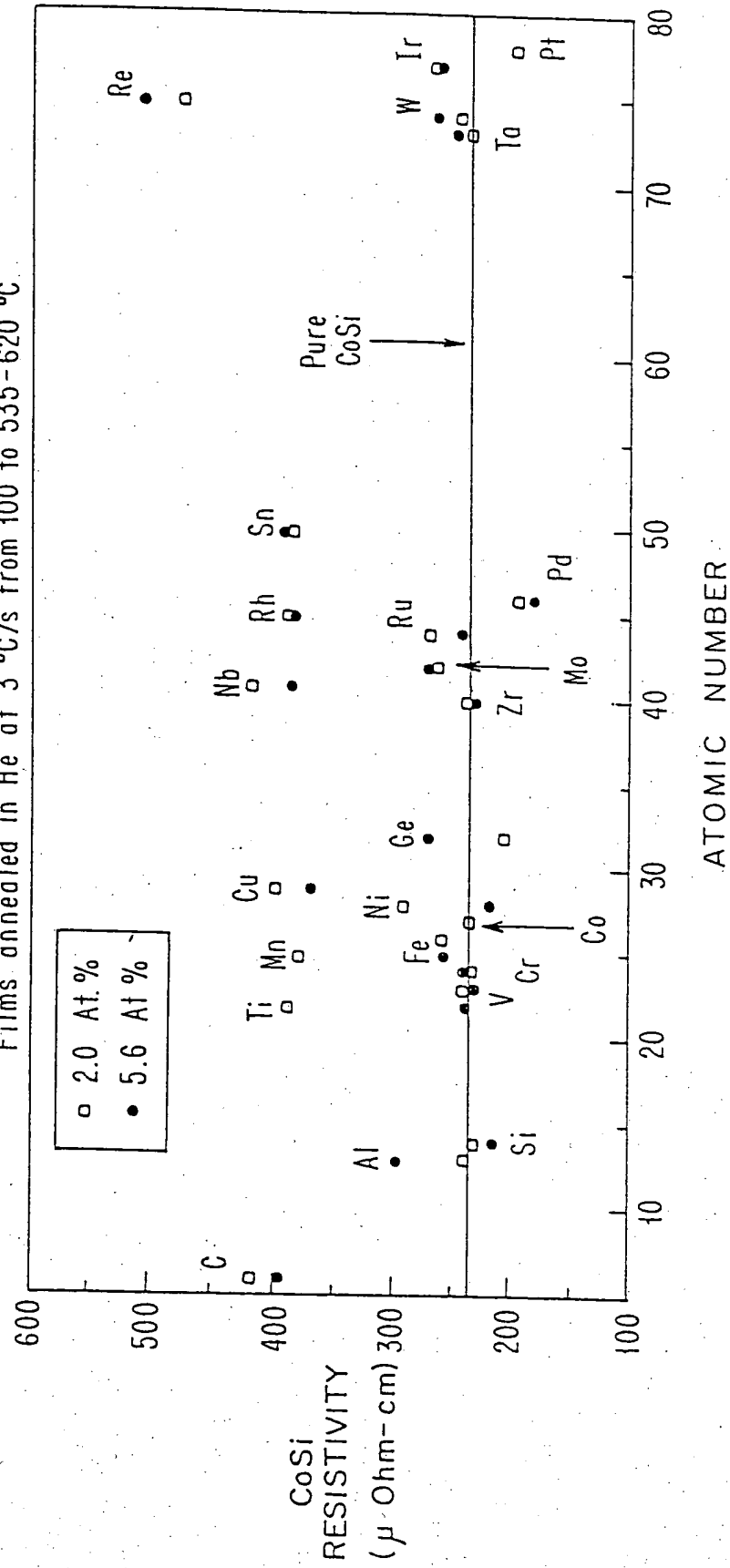
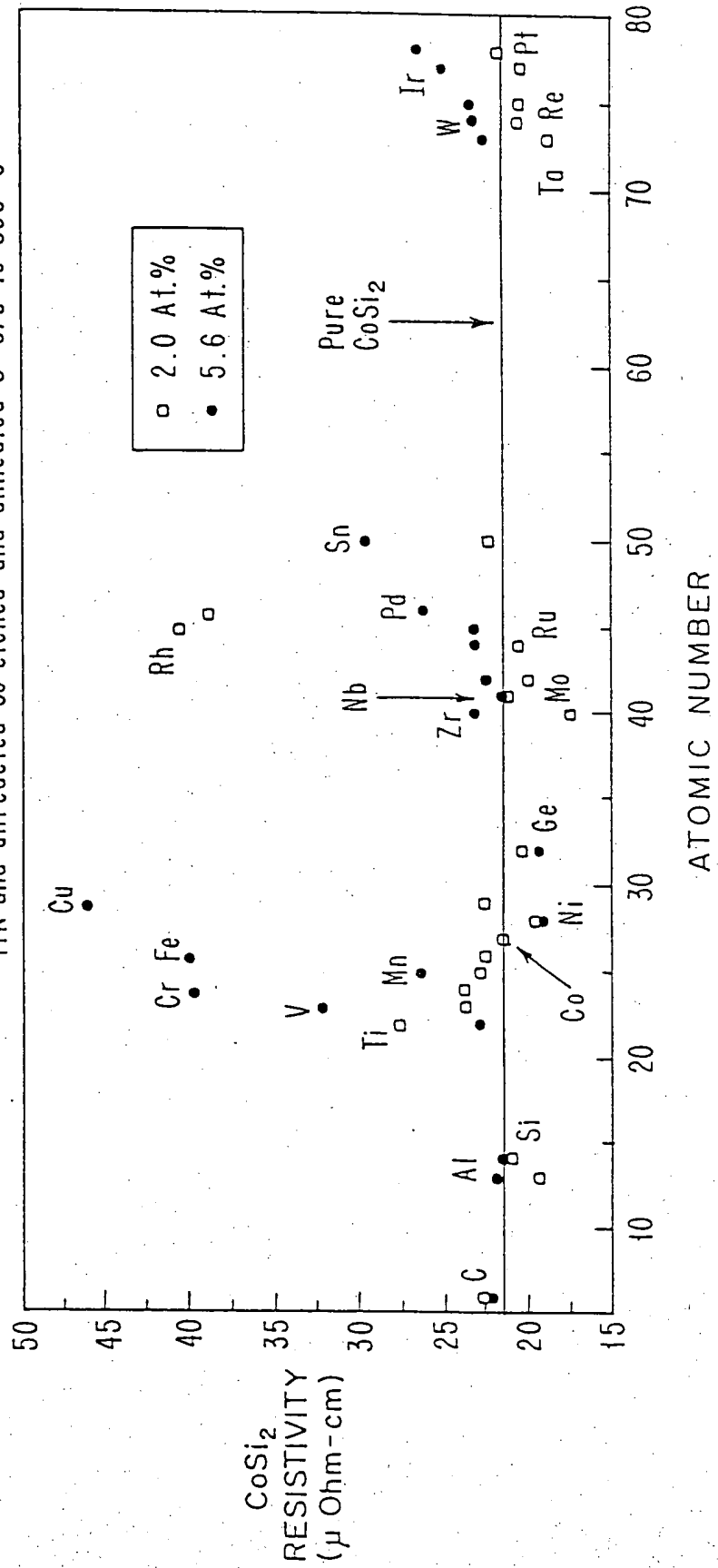


FIG. 5b

7.4-10.5 nm Co (avg. 2.0/5.6 at. % alloy element)/Si(100)
Films annealed in He at 3 °C/s from 100 to 535-620 °C
TiN and unreacted Co etched and annealed 3 °C/s to 800 °C



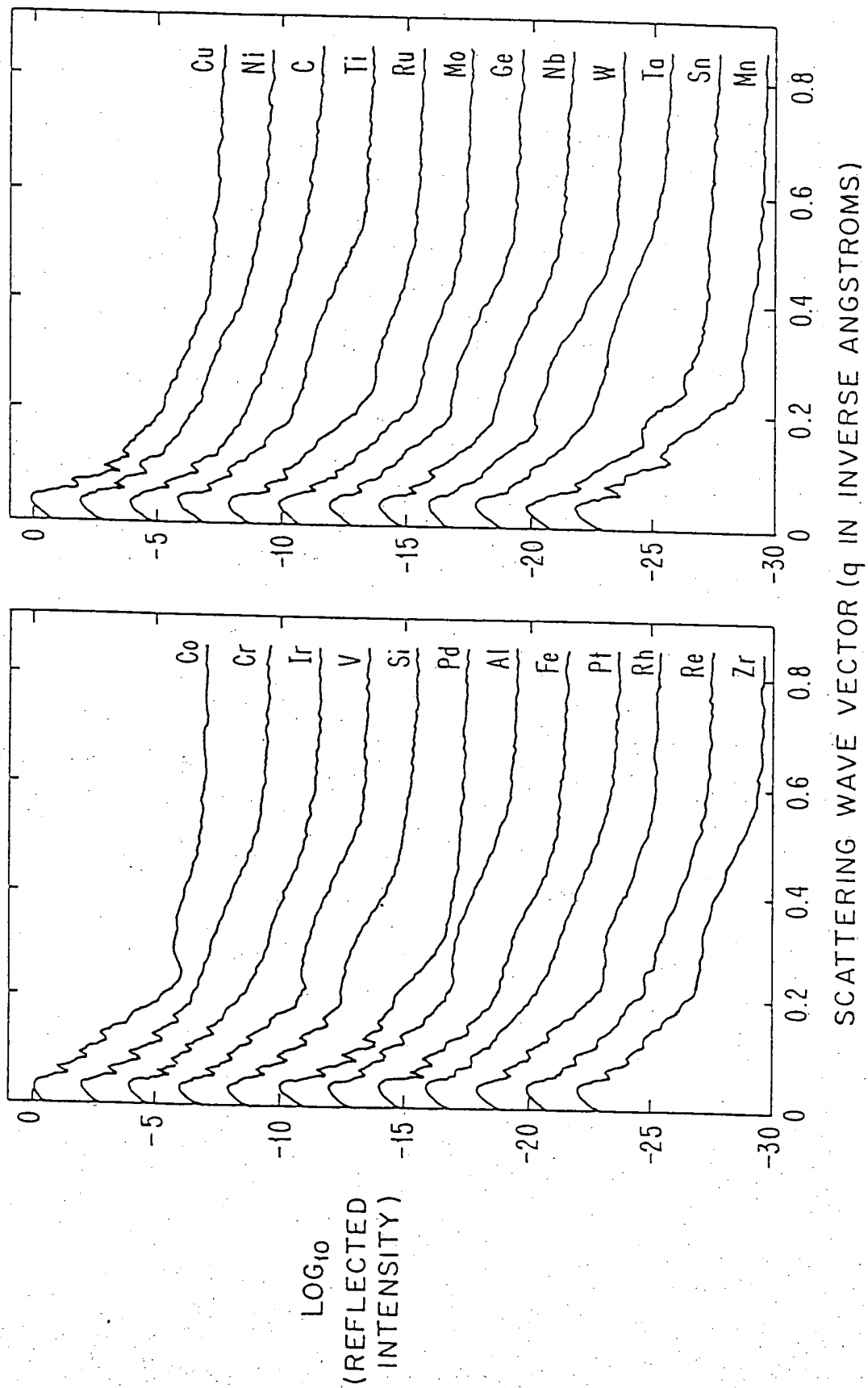


FIG. 6a

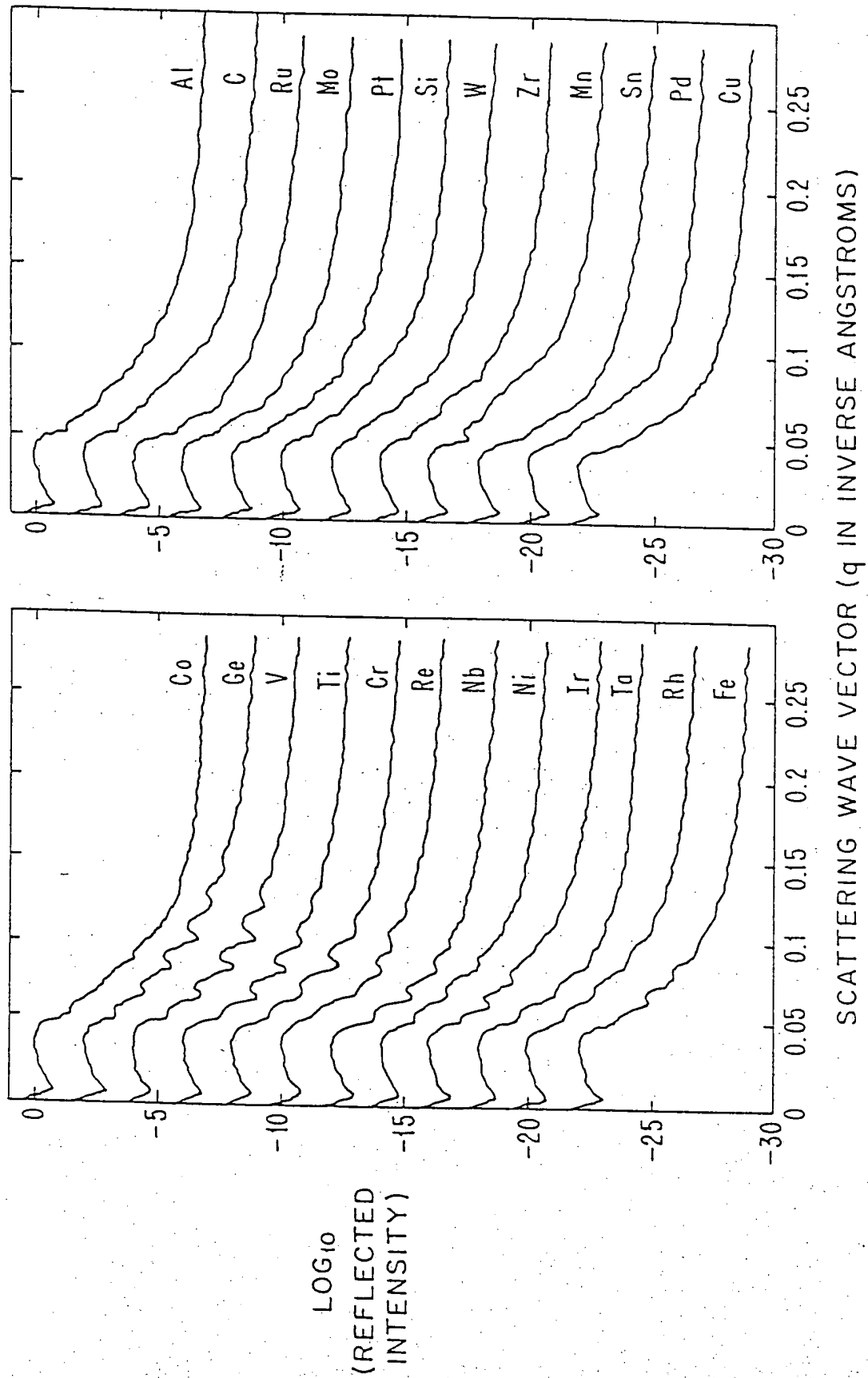


FIG. 6b